LEHIGH
HEIDELBERGCEMENT Group

Lehigh Southwest Cement Company
15390 Wonderland Boulevard
Redding, CA 96003
Phone (530) 275-1581

July 3, 2013

Mr. Ross Bell
Air Division Manager
Air Quality Management District
1855 Placer Street, Suite 101
Redding, CA 96001

RE: Title V Application Addendum: Applicability to 40 CFR Part 63, Subpart ZZZZ, 40 CFR Part 63 Subpart LLLL and 40 CFR Part 60 Subpart F

Dear Mr. Bell:

In response to recent EPA revisions of 40 CFR Part 63, Subpart ZZZZ, 40 CFR Part 63 Subpart LLLL and 40 CFR Part 60 Subpart F, Lehigh Southwest Cement Company is submitting this Title V application addendum to the Title V renewal application deemed administratively complete on November 21, 2012. The purpose of this letter is to detail Lehigh Southwest Cement Company's (Lehigh) applicability to the updated National Emissions Standard For Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as well as the applicability to the finalized amendments of the National Emissions Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing industry and Standards of Performance for Portland Cement.

Lehigh owns six stationary emergency diesel engines: one 489 hp engine and five 2,132 hp engines which are subject to 40 CFR Part 63, Subpart ZZZZ. The requirements of these engines are detailed in the Operation and Maintenance plan attached.

The EPA finalized amendments to 40 CFR Part 63 Subpart LLLL and 40 CFR Part 60 Subpart F on February 12, 2013. These revisions included postponing the compliance date for existing source national emission standards for hazardous air pollutants to September 9, 2015 and for existing clinker storage piles to February 12, 2014. The plan dictates that outside clinker piles must utilize one or more work practices including: partial enclosures, water spray, fogging systems, dust suppressing agents, wind barriers or tarps. The EPA also explained that "open storage piles" are not to include temporary piles that are a result of spillage or temporary use of outdoor storage while clinker building is being cleaned. Temporary piles are those defined as to be in place 3 days or less.

The PM standard for existing sources was updated to 0.07 lb/ ton of clinker. Compliance to this standard is to be based on an annual 3-run test average of a

manual stack test. The amended rule requires sources to establish site-specific parametric operating limits for PM which must be monitored using a PM continuous parametric monitoring system (CPMS), rather than the previously proposed PM CEMS. If during the annual stack test, the PM levels are shown to be 75% or below the emission limit, the PM parametric operating limit is to be a 30 day rolling average equivalent to that 75% level. If the PM levels are shown to be above 75% of the emission limit, the PM parametric operating limit is to be a 30-day rolling average equal to the average PM CPMS values recorded during the stack test.

The EPA maintained the mercury source standard of 55lb/MM tons clinker, and an HCl standard of 3 ppm for existing sources. The final rule also updates that HCl compliance can be determined through periodic performance testing rather than a CEMS for those plants equipped with either wet or dry scrubbers. If wet or dry scrubbers are used operating conditions such as liquid flow rate, pressure and pH for wet scrubbers and sorbent injection rate for dry scrubbers must be continuously monitored to establish compliance. Alternatively, sources may opt to establish SO_2 as an operating parameter. Compliance is based off of a 30-day rolling average and source testing must be completed, at a minimum, every 30 months.

The EPA updated the THC standard to 24 ppm, and the organic HAP standard to 12 ppm. The EPA has established that the THC standard can alternatively be met by parametric monitoring level established by organic HAP testing. This operating level is determined in a way similar to PM whereas source testing that establishes a value that is 75% or less than the emission limit for organic HAP may set the THC parametric operating level corresponding to that 75% level. Source testing that shows emissions in compliance with the organic HAP level but still above 75% of the limit must establish the average THC concentration measured during the 3 hour organic HAP test and use that as the THC operating level. Stack testing determining the organic HAP compliance must be shown as the ratio of three tests runs during mill-on conditions and three test runs during mill-off conditions. The final rule also states that the organic HAP stack test be repeated every 30 months.

Startup and shutdown practices were also updated to work practice standards rather than the previously proposed emissions limits. These work practices include initially using any one or combination of natural gas, synthetic natural gas, propane, distillate oil, synthesis gas, or ultra-low sulfur diesel until the kiln reaches a temperature of 1200 degrees Fahrenheit, at which point combustion of primary kiln fuel may commence. The EPA defined startup to begin when the ID fan turns on and fuel is fired in the main burner. Shutdown ends when feed has been continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of kiln limitation rate. Shutdown is defined to begin when continuous feed to the kiln is halted and ends when the kiln rotation ceases.

Also to note, the Portland Cement Association met with the EPA June 12, 2013 to discuss issues with these final amendments, which may lead to minor changes in the future. If you require any additional information or have any questions please do not hesitate to contact me at (530) 275-1581 ext. 3317.

Sincerely,

Olivia Allsman
Environmental Professional II

STATIONARY SOURCE SUMMARY
(FORM 5-A1)

DISTRICT: Shasta County

COMPANY NAME: Lehigh Southwest Cement Company

< DISTRICT USE ONLY =

District ID:

Application #:

Application Received:

Application Filing Fee:

Application Deemed Complete:

I. FACILITY IDENTIFICATION

1. Facility Name: Lehigh Southwest Cement
2. Four digit SIC Code: 3241 EPA Plant ID: CAL000033704
3. Parent Company (if different than Facility Name):
4. Mailing Address: 15390 Wonderland Blvd; Redding CA. 96003
5. Street Address or Source Location: 15390 Wonderland Blvd; Redding CA. 96003
6. UTM Coordinates (if required):
7. Source located within: 50 miles of the state line [ ] Yes [X] No
   50 miles of a Native American Nation [ ] Yes [X] No [ ] Not Applicable
8. Type of Organization: [X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility Company
9. Legal Owner's Name: Lehigh Southwest Cement Company
10. Owner's Agent Name (if any):
11. Responsible Official: James E. Ellison
12. Plant Site Manager/Contact: James E. Ellison Telephone #: (530)-275-1581 ext. 3301
13. Type of facility: Portland Cement Manufactruing
14. General description of processes/products:

15. Does your facility store, or otherwise handle, greater than threshold quantities of any substance on the Section 112(r) List of Substances and their Thresholds (see attachment A)? [ ] Yes [X] No
16. Is a Federal Risk Management Plan [pursuant to Section 112(r)] required? [X] Not Applicable [ ] Yes [ ] No
    (If yes, attach verification that Risk Management Plan is registered with appropriate agency or description of status of Risk Management Plan submittal.)

STATIONARY SOURCE SUMMARY
(FORM 5-A2)

DISTRICT: Shasta County	< DISTRICT USE ONLY = DISTRICT ID:
COMPANY NAME: Lehigh Southwest Cement Company	FACILITY NAME: Lehigh Southwest Cement Company

II. TYPE OF PERMIT ACTION

	CURRENT PERMIT (permit number)	EXPIRATION (date)
G Initial Title V Application		
G Permit Renewal	X	
G Significant Permit Modification		
G Minor Permit Modification		
G Administrative Amendment		

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action requested involve: a: [ ] Portable Source [ ] Voluntary Emissions Caps
   [ ] Acid Rain Source [ ] Alternative Operating Scenarios
   [X] Source Subject to MACT Requirements [Section 112]

   b: [ ] None of the options in 1.a. are applicable

2. Is source operating under Compliance Schedule? [X] Yes [ ] No

3. For permit modifications, provide a general description of the proposed permit modification:_____

CERTIFICATION STATEMENT
(FORM 5-M)

DISTRICT: Shasta County	**< DISTRICT USE ONLY =** **DISTRICT ID:**
COMPANY NAME: Lehigh Southwest Cement Company	**FACILITY NAME: Lehigh Southwest Cement Company**

Identify, by checking off below, the forms and attachments that are part of your application. If the application contains forms or attachments that are not identified below, please identify these attachments in the blank space provided below. Review the instructions if you are unsure of the forms and attachments that need to be included in a complete application.

Forms included with application

___ Stationary Source Summary Form

___ Total Stationary Source Emission Form

___ Compliance Plan Form

___ Compliance Plan Certification Form

___ Exempt Equipment Form

_X_ Certification Statement Form

List other forms or attachments

Cover Letter

_____

_____

_____

[ ] check here if additional forms listed on back

Attachments included with applications

___ Description of Operating Scenarios

___ Sample emission calculations

___ Fugitive emission estimates

___ List of Applicable requirrements

___ Discussion of units out of compliance with applicable federal requirements and, if required, submit a schedule of Compliance

___ Facility schematic showing emission points

___ NSR Permit

___ PSD Permit

___ Enhanced monitoring protocols

___ Risk management verification per 112(r)

List Other Forms or Attachments (cont.)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, that the information contained in this application, composed of the forms and attachments identified above, are true, accurate, and complete.

I certify that I am the responsible official, as defined in Rule 5.

Signature of Responsible Official — Date: 7/5/13

James E. Ellison
Print Name of Responsible Official

Plant Manager: Lehigh Southwest Cement Company
Title of Responsible Official and Company Name

LEHIGH

HEIDELBERGCEMENT Group

OPERATION AND MAINTENANCE PLAN

Prepared By:

LEHIGH SOUTHWEST CEMENT COMPANY

Redding, CA Plant

May, 2013

1.0 INTRODUCTION

This O&M Plan (Plan) for the Lehigh Southwest Cement Company, Redding, CA, was prepared to meet the requirements of the:

- National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE MACT: 40 CFR 63, Subpart ZZZZ).

The procedures to maintain and monitor compliance with the RICE MACT Standards are presented in the Plan. Upon review of the regulatory requirements defining major/area sources, and based on a review of existing emissions data and the design and operation of the facility, the Redding Plant is an area source. As a result of this area source determination, the only affected source under the NESHAP rule for Stationary RICE at the Redding facility is the kiln auxiliary drive. Specifically this Plan addresses:

- Procedures for proper operation and maintenance of the engine.
- Procedures to continuously monitor the hours of operation.

2.0 PROCESS DESCRIPTION

Lehigh Southwest Cement Company manufactures portland cement at the Redding, CA plant. To produce portland cement, raw materials including limestone, silica sources, and alumina sources are mined on site or purchased and delivered to the plant by truck and railcar. The raw materials are then fed into the raw mill system where they are blended in appropriate portions, ground and conveyed into the kiln feed storage silo. This material, known as kiln feed, is then conveyed to the preheater/precalciner and then to the rotary kiln. The rotary kiln completes the pyroprocessing of raw materials into the intermediate product, "clinker". The clinker is quenched and cooled, and is transferred to storage silos. As needed, the clinker is fed into the finish mill system where it is blended with gypsum and ground into a final product called portland cement.

In summary, the production of Portland cement is a four-step process:

1) Raw material production and/or acquisition,
2) Raw material preparation,
3) Raw material pyroprocessing to form clinker, and
4) Clinker grinding to produce cement.

3.0 AFFECTED SOURCES

The engine(s) affected and regulated under this O&M Plan are:

- Detroit Model V-71 489-bhp
- Five Caterpillar Model ZW3516-CAT 2132-bhp

The initial notification requirement does not apply for an existing stationary emergency RICE.

4.0 OPERATING PROCEDURES

The operation of the Detroit Model V-71 shall be limited to a total 3500 hours/year. The five Caterpillar Model ZW3516 engines shall be limited to a total of 300 hours/year.

The engines may be operated for a maximum of 100 hours per year for specified purposes, which are the following:

- For maintenance checks and readiness testing.
- For emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) in the event of an Energy Emergency Alert Level 2.
- For periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- For non-emergency purposes for up to 50 hours per year, but those 50 hours are counted towards the total 100 hours provided for operation other than for true emergencies. The 50 hours per year for non-emergency purposes cannot be used to generate income for a facility, for example, to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Rule specifies the following work practice during operation:

- Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

5.0 MAINTENANCE PROCEDURES

Preventative maintenance is performed on the generators on a prescribed basis to ensure proper operation. The rule specifies the following work practice requirements:

- Change oil and filter every 500 hours of operation or annually, whichever comes first, except that sources can extend the period for changing the oil if the oil is part of an oil analysis program as discussed below and the condemning limits are not exceeded;
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Sources also have the option to use an oil change analysis program to extend the oil change frequencies specified above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The analysis must be conducted at the same frequencies specified for changing the engine oil. If the condemning limits provided below are not exceeded, the engine owner or operator is not required to change the oil. If any of the condemning limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The condemning limits are as follows:

• Total Base Number is less than 30 percent of the Total Base Number of the oil when new; or

• Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or

• Percent water content (by volume) is greater than 0.5.

6.0 MONITORING REQUIREMENTS

Must keep records of the maintenance conducted on the emergency engine in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to the maintenance plan. The records must include, at a minimum: oil and filter change dates and corresponding hour on the hour meter; inspection and replacement dates for air cleaners, hoses, and belts; and records of other emission-related repairs and maintenance performed [see Table 1].

Must install a non-resettable hour meter on the engine to record the hours of operation of the engine.

Must keep records of the engine hours of operation. The records must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes below, the records must document the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

- If the engine is used for the purposes of emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3; or
- For periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency; or
- The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
    1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
    2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
    3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
    4) The power is provided only to the facility itself or to support the local transmission and distribution system.
    5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

LEHIGH SOUTHWEST CEMENT COMPANY
Table 1: RECORDKEEPING for NESHAP SUBPART ZZZZ

Oil & Filter	Air Cleaner	Hoses & Belts
Changed Every: ☐ 500 hours OR ☐ Annually (if this comes first) Date: Hour meter reading:	Inspect Every 1,000 hours ☐ Replaced Date:	Inspect Every 500 hours ☐ Replaced Date:
Changed Every: ☐ 500 hours OR ☐ Annually (if this comes first) Date: Hour meter reading:	Inspect Every 1,000 hours ☐ Replaced Date:	Inspect Every 500 hours ☐ Replaced Date:
Changed Every: ☐ 500 hours OR ☐ Annually (if this comes first) Date: Hour meter reading:	Inspect Every 1,000 hours ☐ Replaced Date:	Inspect Every 500 hours ☐ Replaced Date:
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